1. A compound of formula (I),

X-CpCpA-NH-Phe (I)

wherein,

X is absent or a label.

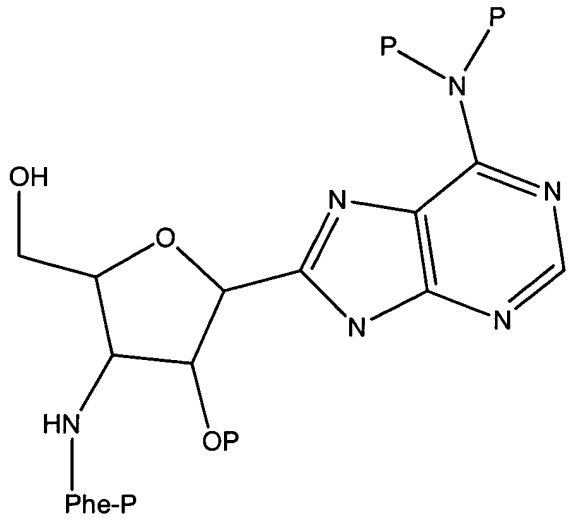
2. The compound of claim 1, wherein the label is a radioactive label.

3. The compound of claim 1, wherein the label is a fluorescence label.

4. The compound of claim 1, wherein the label is attached to the 5'-hydroxy group.

5. The compound of claim 1, wherein the label is ^{32}P.

6. A method of making a compound of formula (I) in claim 1, the method comprising providing a compound of formula (II):

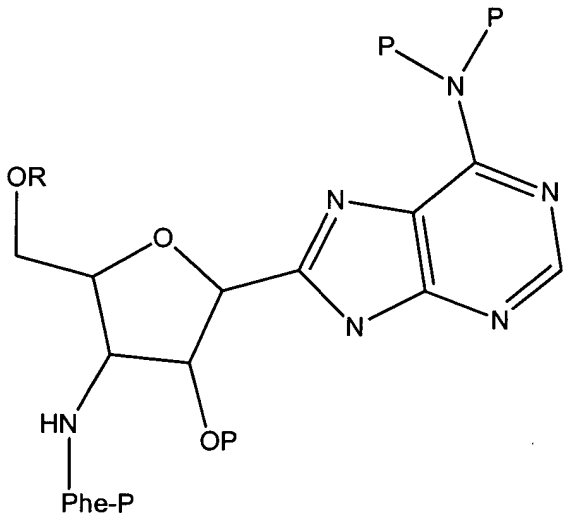


(II)

wherein

each P is independently an oxygen- or nitrogen-protecting group;

and converting it to a hydroxyl-group protected derivative of formula (III):



(III)

wherein

each R is an oxygen-protecting group; and

each P is independently an oxygen- or nitrogen-protecting group.

7. The method of claim 6, wherein R is a silyl group.

8. The method of claim 6, wherein R is tert-butyldiphenylsilyl or dimethoxytrityl.

9. The method of claim 6, wherein P is benzyl.

10. The method of claim 6, further comprising converting the hydroxyl-group protected derivative to a compound of formula (I).

11. The method of claim 6, further comprising removing the protecting group from the hydroxyl-group protected derivative and attaching a label to the resulting hydroxyl-group.

12. The method of claim 11, further wherein the label is attached by reaction of γ-^{32}P-ATP with the resulting hydroxyl-group.

13. The method of claim 11, wherein the label is a radioactive label.

14. The method of claim 11, wherein the label is ^{32}P.

15. A method for monitoring peptide bond formation, the method comprising:

providing a mixture comprising a peptidyl transferase, a peptidyl-tRNA analog, and an aminoacyl-tRNA analog of formula (I) in claim 1;

incubating the mixture under conditions sufficient to enable peptide bond formation; and

monitoring the mixture for peptide bond formation.

16. The method of claim 15, wherein the aminoacyl-tRNA analog is ^{32}p*CpCpA-NH-Phe.

17. The method of claim 15, wherein the mixture further comprises a test compound, and the method is used to monitor the effect of the test compound on peptide bond formation.

18. The method of claim 15, wherein the peptidyl-tRNA analog is an amino acid conjugated to an oligonucleotide.

19. The method of claim 15, wherein the peptidyl-tRNA analog is 5'-CCA-phenylalanine, 5'-CACCA-phenylalanine, 5'-CACCA-methionine, 5'-CAACCA-formylmethionine, or tRNA-phenylalanine.

20. The method of claim 15, wherein the aminoacyl-tRNA analog is capable of being detected by polyacrylamide gel electrophoresis (PAGE).

21. The method of claim 15, wherein the peptidyl transferase is a ribosomal subunit.

22. A method for screening test compounds, comprising:

(a) incubating a mixture comprising a peptidyl transferase, a peptidyl-tRNA analog, an aminoacyl-tRNA analog of formula (I) in claim 1, and one or more test compounds; and

(b) determining the rate of transfer of the peptidyl moiety of the peptidyl-tRNA analog to the free amino group of the aminoacyl-tRNA analog for each test compound.

23. The method of claim 22, wherein the screening is performed in a high-throughput format.

24. The method of claim 22, wherein the test compounds are members of a combinatorial library.

25. The method of claim 22, wherein the peptidyl transferase is a ribosomal subunit.

26. A method for determining whether a test compound is a candidate antibacterial agent, the method comprising:

(a) incubating a mixture comprising a peptidyl transferase, a peptidyl-tRNA analog, an aminoacyl-tRNA analog of formula (I) in claim 1, and one or more test compounds;

(b) determining the rate of transfer of the peptidyl moiety of the peptidyl-tRNA analog to the free amino group of the aminoacyl-tRNA analog for each test compound; and

(c) identifying one or more test compounds that inhibit peptidyl transferase activity, wherein a compound that inhibits peptidyl transferase activity is a candidate antibacterial agent.

27. A kit comprising a compound of formula (I) in claim 1 and instructions for using the compound in an assay to determine peptidyl transferase activity.

28. An inhibitor of peptidyl transferase activity identified by a method comprising:

(a) incubating a mixture comprising a peptidyl transferase, a peptidyl-tRNA analog, an aminoacyl-tRNA analog of formula (I) of claim 1, and one or more test compounds, under conditions allowing transfer of the peptidyl moiety of the peptidyl-tRNA analog to the aminoacyl-tRNA analog;

(b) determining the rate of transfer of the peptidyl moiety of the peptidyl-tRNA analog to the free amino group of the aminoacyl-tRNA analog for each test compound; and

(c) identifying one or more test compounds that inhibit peptidyl transferase activity, wherein a test compound so identified is an inhibitor of peptidyl transferase activity.